

ABSTRACT OF THE DISCLOSURE

A method is for producing monolithic substrate catalysts and for their use in the gas phase oxidation of hydrocarbons. The catalysts are obtained by coating the catalyst substrate with a suspension that includes a catalytically active compound and one or more surfactants of the general formula $R_n Y_m X$. R represents the hydrophobic part of the surfactant, with n being 1, 2 or 3. Y represents the hydrophilic part of the surfactant, with m being 0, 1, 2 or 3 and X represents the hydrophilic head group of the surfactant.